

HAZARDS IDENTIFICATION

(ANSI Section 3)

Primary route(s) of exposure : Inhalation, skin contact, eye contact, ingestion.

Effects of overexposure :

Inhalation : Irritation of respiratory tract. Prolonged inhalation may lead to mucous membrane irritation, dizziness and/or lightheadedness, headache, nausea, coughing, central nervous system depression. Possible sensitization to respiratory tract.

Skin contact : Irritation of skin. Prolonged or repeated contact can cause dermatitis. Possible sensitization to skin. Skin contact may result in dermal absorption of component(s) of this product which may cause headache, nausea, central nervous system depression.

Eye contact : Irritation of eyes. Prolonged or repeated contact can cause conjunctivitis, tearing of eyes, redness of eyes, severe eye irritation, severe eye irritation or burns.

Ingestion : Ingestion may cause mouth and throat irritation, drowsiness, dizziness and/or lightheadedness, headache, uncoordination, nausea, vomiting, diarrhea, gastro-intestinal disturbances, abdominal pain, central nervous system depression, intoxication, liver damage, kidney damage, reproductive system damage.

Medical conditions aggravated by exposure : Eye, skin, respiratory disorders

FIRST-AID MEASURES

(ANSI Section 4)

Inhalation : Remove to fresh air. Restore and support continued breathing. Get emergency medical attention. Have trained person give oxygen if necessary. Get medical help for any breathing difficulty. Remove to fresh air if inhalation causes eye watering, headaches, dizziness, or other discomfort. Get medical attention if discomfort or irritation persists.

Skin contact : Wash thoroughly with soap and water. If any product remains, gently rub petroleum jelly, vegetable or mineral/baby oil onto skin. Repeated applications may be needed. Remove contaminated clothing. Wash contaminated clothing before re-use. If irritation occurs, consult a physician.

Eye contact : Flush immediately with large amounts of water, especially under lids for at least 15 minutes. If irritation or other effects persist, obtain medical treatment.

Ingestion : If swallowed, obtain medical treatment immediately.

FIRE-FIGHTING MEASURES

(ANSI Section 5)

Fire extinguishing media : Dry chemical or foam water fog. Carbon dioxide. Closed containers may explode when exposed to extreme heat or fire. Vapors are heavier than air and may travel long distances to a source of ignition and flash back. Vapors can form explosive mixtures in air at elevated temperatures. Closed containers may burst if exposed to extreme heat or fire. Dust explosion hazard. May decompose under fire conditions emitting irritant and/or toxic gases.

Fire fighting procedures : Water may be used to cool and protect exposed containers. Firefighters should use full protective clothing, eye protection, and self-contained breathing apparatus.

Hazardous decomposition or combustion products : Carbon monoxide, carbon dioxide, oxides of nitrogen, toxic gases. Propionaldehyde

ACCIDENTAL RELEASE MEASURES

(ANSI Section 6)

Steps to be taken in case material is released or spilled : Comply with all applicable health and environmental regulations. Eliminate all sources of ignition. Ventilate area. Evacuate all unnecessary personnel. Place collected material in proper container. Complete personal protective equipment must be used during cleanup. Large spills - shut off leak if safe to do so. Dike and contain spill. Pump to storage or salvage vessels. Use absorbent to pick up excess residue. Keep salvageable material and rinse water out of sewers and water courses. Small spills - use absorbent to pick up residue and dispose of properly.

HANDLING AND STORAGE

(ANSI Section 7)

Handling and storage : Store below 100°F (38°C). Keep away from heat, sparks and open flame. Keep from freezing. Keep container tightly closed in a well-ventilated area.

Other precautions : Use only with adequate ventilation. Do not take internally. Keep out of reach of children. Avoid contact with skin and eyes, and breathing of vapors. Wash hands thoroughly after handling, especially before eating or smoking. Keep containers tightly closed and upright when not in use. Avoid conditions which result in formation of inhalable particles such as spraying or abrading (sanding) painted surfaces. If such conditions cannot be avoided, use appropriate respiratory protection as directed under exposure controls/personal protection. Empty containers may contain hazardous residues. Ground equipment when transferring to prevent accumulation of static charge.

EXPOSURE CONTROLS/PERSONAL PROTECTION

(ANSI Section 8)

Respiratory protection : Control environmental concentrations below applicable exposure standards when using this material. When respiratory protection is determined to be necessary, use a NIOSH/MSHA (Canadian 294.4) Approved elastomeric sealing- surface facepiece respirator outfitted with organic vapor cartridges and paint spray (dust/mist) prefilters. Determine the proper level of protection by conducting appropriate air monitoring. Consult 29CFR1910.134 For selection of respirators (Canadian 294.4).

Ventilation : Provide dilution ventilation or local exhaust to prevent build-up of vapors.

Personal protective equipment : Eye wash, safety shower, safety glasses or goggles. Impervious gloves, impervious clothing, face shield, apron.

STABILITY AND REACTIVITY

(ANSI Section 10)

Under normal conditions : Stable see section 5 fire fighting measures

Materials to avoid : Oxidizers, acids, bases. Alkalis peroxides, nitric acid, hydrofluoric acid, caustics. Nitrates.

Conditions to avoid : Elevated temperatures, contact with oxidizing agent, freezing, sparks, open flame, ignition sources.

Hazardous polymerization : Will not occur

TOXICOLOGICAL INFORMATION

(ANSI Section 11)

Supplemental health information : Contains a chemical that may be absorbed through skin. Notice - reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Other effects of overexposure may include toxicity to liver, kidney, blood, reproductive system.

Carcinogenicity : In 2-year feed studies of c.I. Pigment red 3, there was some evidence of carcinogenic activity in male rats (adrenal gland - benign pheochromocytomas) and female rats (hepatocellular adenomas). There was also some evidence of carcinogenic activity in male mice (adenomas of renal cortex and thyroid gland), but no evidence in female mice.

Reproductive effects : No reproductive effects are anticipated

Mutagenicity : No mutagenic effects are anticipated

Teratogenicity : Prolonged ingestion of diethylene glycol monomethyl ether has resulted in fetal development abnormalities in rats and effects on fertility in mice.

ECOLOGICAL INFORMATION

(ANSI Section 12)

No ecological testing has been done by ICI paints on this product as a whole.

The information contained herein is based on data available at the time of preparation of this data sheet which ICI Paints believes to be reliable. However, no warranty is expressed or implied regarding the accuracy of this data. ICI Paints shall not be responsible for the use of this information, or of any product, method or apparatus mentioned and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and the health and safety of your employees and the users of this material. Complies with OSHA hazard communication standard 29CFR1910.1200.

DEVFLEX 4216HP HIGH PERFORMANCE WATERBORNE ACRYLIC SEMI-GLOSS ENAMEL
ICI Paints North America
925 Euclid Avenue Cleveland, Ohio 44115
EMERGENCY TELEPHONE NO. (800) 545-2643

4216

DISPOSAL CONSIDERATIONS**(ANSI Section 13)**

Waste disposal : Dispose in accordance with all applicable regulations. Avoid discharge to natural waters.

REGULATORY INFORMATION**(ANSI Section 15)**

As of the date of this MSDS, all of the components in this product are listed (or are otherwise exempt from listing) on the TSCA inventory. This product has been classified in accordance with the hazard criteria of the CPR (controlled products regulations) and the MSDS contains all the information required by the CPR.

Physical Data**(ANSI Sections 1, 9, and 14)**

Product Code	Description	Wt. / Gal.	VOC gr. / ltr.	% Volatile by Volume	Flash Point	Boiling Range	HMS	DOT, proper shipping name
4216-0100	devflex 4216hp high performance waterborne acrylic semi-gloss enamel white tint base	10.32	225.29	65.80	none	212-453	*310	paint ** protect from freezing **
4216-0200	devflex 4216hp high performance waterborne acrylic semi-gloss enamel pastel tint base	10.02	234.64	66.83	none	212-453	*310	paint ** protect from freezing **
4216-0300	devflex 4216hp high performance waterborne acrylic semi-gloss enamel intermediate tb	9.23	236.20	69.48	none	212-453	*310	paint ** protect from freezing **
4216-0400	devflex 4216hp high performance waterborne acrylic semi-gloss enamel deep tint base	8.65	240.15	69.08	none	212-453	*310	paint ** protect from freezing **
4216-1000	devflex 4216hp high performance waterborne acrylic semi-gloss enamel white tint base	10.32	225.53	65.77	none	212-453	*310	paint ** protect from freezing **
4216-9000	devflex 4216hp high performance waterborne acrylic semi-gloss enamel safety red	8.58	219.18	65.34	none	149-453	*310	paint ** protect from freezing **
4216-9200	devflex 4216hp high performance waterborne acrylic semi-gloss enamel safety orange	9.03	246.74	66.12	none	212-453	*310	paint ** protect from freezing **
4216-9400	devflex 4216hp high performance waterborne acrylic semi-gloss enamel safety yellow	9.17	218.22	65.18	none	212-453	*310	paint ** protect from freezing **

Ingredients**Product Codes with % by Weight (ANSI Section 2)**

Chemical Name	Common Name	CAS. No.	4216-0100	4216-0200	4216-0300	4216-0400	4216-1000	4216-9000	4216-9200	4216-9400
ethanol, 2-(2-methoxyethoxy)-	diethylene glycol monomethyl ether	111-77-3	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5
ethanol, 2-(2-butoxyethoxy)-	diethylene glycol monobutyl ether	112-34-5	5-10	5-10	5-10	5-10	5-10	5-10	5-10	5-10
titanium oxide	titanium dioxide	13463-67-7	20-30	10-20	10-20	1-5	20-30		1-5	5-10
butanamide, 2-((4-chloro-2-nitrophenyl)azo)- n-(2-methoxyphenyl)-3-oxo-	c.i. pigment yellow 73	13515-40-7								5-10
2-naphthalenol, 1-((4-methyl-2-nitrophenyl)azo)-	pigment red 3	2425-85-6						5-10		
2-naphthalenol, 1-((2,4-dinitrophenyl)azo)-	dinitroaniline orange	3468-63-1							1-5	
1,2-propanediol	propylene glycol	57-55-6							1-5	
butanamide, 2-((2-methoxy-4-nitrophenyl)azo)- n-(2-methoxyphenyl)-3-oxo-	pigment yellow 74	6358-31-2							1-5	
water	water	7732-18-5	40-50	40-50	50-60	50-60	40-50	50-60	40-50	40-50
surfactant	surfactant	Sup. Conf.						1-5		
trade secret	trade secret	Sup. Conf.							1-1.0	
acrylic resin	acrylic resin	Sup. Conf.	20-30	20-30	20-30	20-30	20-30	20-30	20-30	20-30

Chemical Hazard Data**(ANSI Sections 2, 8, 11, and 15)**

Common Name	CAS. No.	ACGIH-TLV				OSHA-PEL				S.R. Std.	S2	S3	CC	H	M	N	I	O
		8-Hour TWA	STEL	C	S	8-Hour TWA	STEL	C	S									
diethylene glycol monomethyl ether	111-77-3	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	y	n	y	n	n	n	n
diethylene glycol monobutyl ether	112-34-5	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	y	n	y	n	n	n	n
titanium dioxide	13463-67-7	10 mg/m3	not est.	not est.	not est.	10 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
c.i. pigment yellow 73	13515-40-7	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n

Footnotes:

C= Ceiling - Concentration that should not be exceeded even instantaneously

S=Skin - Additional exposure, over and above airborne exposure, may result from skin absorption.

n/a=not applicable
not est.=not established
CC=CERCLA Chemical

ppm=parts per million
mg/m3=milligrams per cubic meter
Sup Conf=Supplier Confidential

S2=Sara Section 302 EHS
S3=Sara Section 313 Chemical
S.R. Std.=Supplier Recommended Standard

H=Hazardous Air Pollutant, M=Marine Pollutant
P=Pollutant, S=Severe Pollutant
Carcinogenicity Listed By:
N=NTP, I=IARC, O=OSHA, y=yes, n=no

Chemical Hazard Data (Continued) (ANSI Sections 2, 8, 11, and 15)

Common Name	CAS. No.	ACGIH-TLV				OSHA-PEL				S.R. Std.	S2	S3	CC	H	M	N	I	O
		8-Hour TWA	STEL	C	S	8-Hour TWA	STEL	C	S									
pigment red 3	2425-85-6	10 mg/m3	not est.	not est.	not est.	15 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
dinitroaniline orange	3468-63-1	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
propylene glycol	57-55-6	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
pigment yellow 74	6358-31-2	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
surfactant	Sup. Conf.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
trade secret	Sup. Conf.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n

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S.R.Std.=Supplier Recommended Standard

H=Hazardous Air Pollutant, M=Marine Pollutant
P=Pollutant, S=Severe Pollutant
Carcinogenicity Listed By:
N=NTP, I=IARC, O=OSHA, y=yes, n=no